Cash Market Call –
Key Features of T7 Release 10.0

June 2021
Agenda

1. Multi-currency trading for ETFs and ETPs
2. Trading Hours Extension for Börse Frankfurt
3. Automated Corridor Expansion Volatility Model
1 Multi-Currency trading for ETFs and ETPs
Multi-Currency Trading for ETFs / ETPs on Xetra (MIC XETR)

### Current Offering
- One trading currency per ISIN
- Limitation:
  - Issuers of ETFs / ETPs were required to list separate ISINs per product-currency combination
  - Market Makers need to manage liquidity provision/inventory for separate ISINs

### New Offering
- One or several trading currencies per ISIN (currently up to 9 currencies possible)
- Objective
  - Ease new listing of products for issuers
  - Make inventory management for market makers more efficient
  - Create new trading opportunities for members
  - Reduce FX risk for EU and foreign investors
# Concept of Multi-Currency Trading

## Basic Concept

- **Multi-Currency Trading concept:** Same ISIN, different trading symbols, different currencies on the same trading venue
- Resulting trades are **cleared** via Eurex Clearing (alternatively via EuroCCP) and **settled in the respective trading currency** via Clearstream Banking / Clearstream Banking International

## Scope

- Multi-currency trading will be available for **ETFs and ETPs on Xetra only (MIC XETR)**
- At start, available currency is planned to be **USD** (other non-EUR currencies - **AUD, CAD, CHF, CNY, GBP, JPY and SEK** - will follow in due course)

## Liquidity providers

- **Prerequisite** for trading an ISIN-currency combination is at least one **Designated Sponsor**
- Designated Sponsors and Regulatory Market Makers have to **register for every ISIN-currency combination separately**
Member Impact of Multi-Currency Trading

<table>
<thead>
<tr>
<th>Interface type</th>
<th>Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ETI</strong></td>
<td>an instrument can be identified using the field securityID (tag 48) assigned to each individual instrument</td>
</tr>
<tr>
<td><strong>FIX</strong></td>
<td>To uniquely identify an instrument, member can choose between:</td>
</tr>
<tr>
<td></td>
<td>- SecurityIDSource (tag 22) = “M” (Marketplace-assigned identifier) and the field securityID (tag 48) filled with instrument ID assigned by T7 or</td>
</tr>
<tr>
<td></td>
<td>- SecurityIDSource (tag 22) = “4” (ISIN) and the field securityID (tag 48) filled with the ISIN. For multi-currency trading, the field Currency (tag 15) is mandatory in case no EUR orderbook is available. In case a EUR orderbook is available and if the field currency is empty the order is routed the EUR book by default. The field symbol (tag 55) may contain “[N/A]” (instead of product identifier).</td>
</tr>
<tr>
<td><strong>GUI</strong></td>
<td>will use an ISIN-currency combination (e.g. “DE0001111110.EUR” and “DE0001111110.USD”) to identify an instrument / orderbook</td>
</tr>
</tbody>
</table>

**Reference data**
- T7 reference data is available for every ISIN-currency combination
- WM-Daten offers support for Multi-Currency Trading on Xetra, i.e. additional ISIN-currency combinations can be identified via WM-Daten

**Reports**
- Reports (Trading, Billing, Regulatory) will be adapted to allow a distinct allocation of information to ISIN-currency combination

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* T7 Interface Specifications already in place (no changes planned in T7 10.0); pls refer to xetra.com > Technology > T7 trading architecture > System documentation > Release 9.1
** With the introduction of the new FIX LF Gateway the Currency field will be mandatory for all order entries in all instruments. For further details on the FIX LF Gateway migration please refer to the T7 10.00 Release Notes.
Checklist

Members that WANT TO participate

- Members should **analyze** potential impact on their systems and interfaces **where the ISIN is used as a primary key**
- Members may have to **consider** that **in a front-end (GUI) the ISIN is not anymore sufficient to identify an instrument / orderbook**
- Members should **check** if they are **already registered for trading in a specific foreign currency** (if yes, no new registration needed*)
- Members relying on WM-Daten for their order-routing should **check how WM-Daten handles Multi-Currency Trading**
- Designated Sponsors, Market Makers and Xetra EnLight Responders **may register for every ISIN-Currency combination**

Members that DO NOT WANT TO participate

- Members need to ensure that their orders are routed to the **ISIN-Currency combination they expect**
- Members relying on WM-Daten may decide to rout to a **“default” currency order book**
- Members connecting via the **FIX interface** to T7 may consider making use of the **default currency implementation** described previously

* For information please contact your KAM
2 Trading Hour Extension for Börse Frankfurt
Trading Hour Extension on Börse Frankfurt (MIC XFRA)

- Börse Frankfurt plans to extend the cleared trading hours for equities, ETFs / ETPs and mutual funds to 8:00h - 22:00h* (from 8:00h - 20:00h)
- All trades completed after 20:00h are concluded on T, cleared and settled on T+2; as for any other orderbook trade
- Allows for centrally cleared trading after 20:00h for the first time
- Enables traders to trade US shares during the full regular trading hours of US market

*Bonds will remain to be traded from 8:00h - 17:30h
## Member Impact of Trading Hour Extension

### Impact
- Impact on **T7 members** should be **limited** as Structured Products are already traded today on Börse Frankfurt until 22:00h
- Impact on **Eurex Clearing side** is coordinated by the **C7 SCS project**

### Availability
- T7 Interfaces ETI and FIX as well as GUI **available as today**
- **Timing** of member **reports** (Trading, Billing, Regulatory) planned **not to be changed**

### Trading phases
- **“Trading”** phase for equities, ETFs / ETPs, mutual funds is now aligned with Structured Products
- **“Post-trading”** phase for equities, ETFs / ETPs, and mutual funds is reduced to 5 minutes (as today for Structured Products)
- End of “post-trading” phase for bonds moved from **20:29h** to **22:04h**
3 Introduction of the Automated Corridor Expansion Volatility Model
Current ETF / ETP trading safeguards on Xetra - Standard and extended volatility interruptions

- Trading is interrupted by a volatility interruption whenever the potential execution price lies outside a predefined price corridor (dynamic and/or static price corridor).
- The dynamic corridor (narrower corridor) is set around the last traded price, while the static corridor (broader corridor) is set around the last auction price.
- Both price corridors are determined based on the historical volatility of each ETF/ETP and are not disclosed to the market.

- Once a volatility interruption is triggered, trading switches from continuous trading to an auction model where indicative auction prices are disseminated and market participants can enter, modify or delete orders.
- After a minimum auction duration of two minutes plus a random end, price determination takes place (standard volatility interruption), or
- If the potential execution price lies outside a broader predefined corridor, the auction phase will be extended until it is terminated manually (extended volatility interruption).
ACE Volatility Model aims to increase speed and transparency of volatility auction processing

<table>
<thead>
<tr>
<th>Rationale</th>
<th>Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covid-19 crisis resulted in unprecedented period of market stress over multiple trading days in Mar/Apr 2020</td>
<td>Speed up vola auction processing during periods of severe market stress through higher degree of automation</td>
</tr>
<tr>
<td>Significant price movements and extreme market volatility at opening triggered large number of simultaneous extended volatility interruptions</td>
<td>Maintain high price quality of order executions by introducing optional price quality controls</td>
</tr>
<tr>
<td>Manual processing of extended vola interruptions let to instruments being held longer in auction states, limiting number of ETFs/ETPs available for continuous trading</td>
<td>Improve transparency and predictability of volatility auctions by disclosing corridor thresholds and duration of call phases</td>
</tr>
<tr>
<td>In order to speed up processing of vola auctions during periods of severe market stress, ACE aims to improve existing vola interruption concept by introducing an element of greater automation</td>
<td>Minimise manual impact on auction processing workflow to ensure simultaneous instrument availability in continuous trading whenever possible</td>
</tr>
<tr>
<td></td>
<td>Introduce future-proof design that keeps pace with growing number of instruments</td>
</tr>
</tbody>
</table>

- Public
ACE volatility model introduces automatically expanding auction corridors at given time intervals

ACE model workflow during Opening Auction

- New ACE volatility model replaces single standard volatility interruption with multiple, automatically expanding auction corridors at given time intervals
- ACE auction corridors allow for consecutively larger price deviations from the previous reference price
- Optional price quality controls can be enabled to ensure that price quality is not compromised
- Concept of manual auction termination will be maintained for events where price determination within a given number of ACE auction corridors is not possible
- Number of auction corridors, individual corridor thresholds and duration of each corridor call phase will be disclosed to the public

RP: Reference price (last traded price or last auction price)

$C_i$: ACE auction corridor $i$ with pre-defined percentage thresholds around RP

$RP + C_0 - C_0 + C_1 - C_1 + C_i - C_i + C_n - C_n$
Annex
# Detailed Planned Trading Schedule

for Börse Frankfurt (MIC XFRA)

<table>
<thead>
<tr>
<th>Product State</th>
<th>Instrument State</th>
<th>Bonds</th>
<th>BFZ-Warrants</th>
<th>Equities, ETFs/ETPs, Mutual Funds, Subscription Rights</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start of Day</td>
<td>Closed</td>
<td>06:00 - 06:59</td>
<td>06:00 - 06:59</td>
<td>06:00 - 06:59</td>
</tr>
<tr>
<td>Pre-Trading</td>
<td>Book</td>
<td>07:00 - 07:59</td>
<td>07:00 - 07:59</td>
<td>07:00 - 07:59</td>
</tr>
<tr>
<td>Trading</td>
<td>Pre-Call (Freeze)</td>
<td>08:00 - 17:29</td>
<td>08:00 - 21:59</td>
<td>08:00 - 21:59</td>
</tr>
<tr>
<td>Closing</td>
<td>Book (Freeze)</td>
<td>17:30 - 17:34</td>
<td>22:00 - 22:04</td>
<td>22:00 - 22:04</td>
</tr>
<tr>
<td>TES</td>
<td>On</td>
<td>08:00 - 17:29</td>
<td>08:00 - 21:59</td>
<td>08:00 - 21:59</td>
</tr>
<tr>
<td></td>
<td>Ended</td>
<td>17:30 - 22:04</td>
<td>22:00 - 22:04</td>
<td>22:00 - 22:04</td>
</tr>
<tr>
<td></td>
<td>Off</td>
<td>22:05</td>
<td>22:05</td>
<td>22:05</td>
</tr>
</tbody>
</table>

## Modified
Thank you!

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